

#### MISSION STATEMENT

Our Mission is to provide environmentally sensitive, timely, and fiscally responsible boundary and water services along the United States and Mexico border region. We pledge to provide these services in an atmosphere of binational cooperation and a manner responsive to public concern.

#### INTERNATIONAL BOUNDARY AND WATER COMMISSION

**United States Section** 

The Commons Building C, Suite 310 4171 North Mesa Street El Paso, Texas 79912

Tel.: (915) 832-4100 • Fax: (915) 832-4190

Internet Homepage Address: www.ibwc.state.gov

## Report of the United States Section International Boundary and Water Commission

#### 1997 - 1998

The United States and Mexico entrust to their International Boundary and Water Commission (IBWC) the application of obligations and rights assumed in their boundary and water treaties and other international agreements following the foreign policy guidance of the U.S. Department of State and Mexico's Secretariat of Foreign Relations. The IBWC is made up of a United States Section (USIBWC) and a Mexican Section (MxIBWC). Each Section is headed by an Engineer Commissioner.

The IBWC concluded, and the two Governments approved, four international agreements in the form of IBWC Minutes and assured the construction, operation and maintenance of nine major international joint cooperation projects in application of treaty responsibilities.

The IBWC also adopted five binational technical reports dealing with sanitary facilities planning for five Mexican border cities along the Rio Grande and water quality characterization studies for the Rio Grande, and the Nogales Wash, in addition to El Paso-Juárez and Santa Cruz groundwaters. Further, the IBWC enhanced its activities with state and federal agencies, the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB), the Border 21 process, the Good Neighbor Environment Board and its Mexican counterpart, along with the United States-Mexico Committee on International Bridges and Border Crossings.

This report covers the activities in 1997 and 1998 of the United States Section of the IBWC (USIBWC).

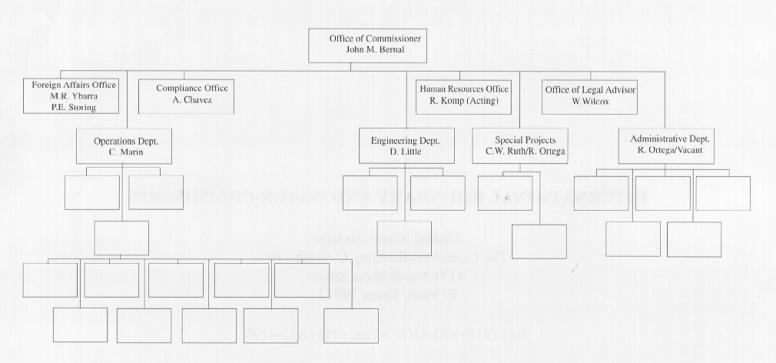


Figure 1: General Organization

## **Organizational Attributes**

The USIBWC organizes its primary functional areas into four Departments, one for Administration functions and three (Operations, Engineering, and Special Projects) for the technical functions. Each technical function Department is headed by a Principal Engineer.

Further, the USIBWC is organized into four advisory offices, Foreign Affairs, Compliance, Human Resources, and Legal Advisor. The general organization is shown at Figure 1, on page 1. As of October 1, 1998, the USIBWC used 254 Full Time Equivalent (FTE) positions.

## Strategic Plan

The USIBWC's strategic planning effort has defined the agency's mission and preferred direction and identified resources and capabilities needed to meet the following five major goals:

- · Identify treaty and minute responsibilities;
- · Assess current operations;
- Improve human, physical, and fiscal resources management;
- Establish a capital improvements program; and
- Integrate future projects with other agency or other regional initiatives

In March 1998, the USIBWC joined MxIBWC in identifying the international organization's priorities at a joint management retreat in Lajitas, Texas.

In November, the USIBWC renewed the Strategic Plan effort at a management retreat, which resulted in a vision statement and identification of the following five tentative strategic goals:

- · Value our human resources in all ways
- · Cultivate stakeholder and public support
- · Innovate all agency functions
- Include Mexico in the strategic planning process
- Promote transboundary cooperation throughout the world

The strategic plan is consistent with the Government Performance and Results Act of 1993.

# Quality of Working Life

Human Resources—Employee recognition, awards, performance evaluation, internal communications and safety programs continue to be improved. These include a combination of monetary and time-off recognition, taking into account funding limitations.

Quality Circles established in the various functional areas improve the flow of communications, including broader distribution of monthly agency progress updates. A circular assessment program was implemented. Performance plans were updated to reflect Government Performance and Results Act of 1993.

## Labor Management Partnership

Council—A Labor Management Partnership Council has been established in recognition of the need for labor representatives and management officials to facilitate meaningful employee involvement in decision making and promoting mutual trust, communications and shared responsibility. Quarterly meetings are being conducted with the two bargaining units. The partnership has been productive in addressing mutual concerns and arriving at solutions.

**Training**—Training was achieved in inter personal communications, languages, and appropriations, among others.

External Communications—The USIBWC strengthened its relations with the public in a number of areas. Some of which involve empowerment of second tier managers at headquarters and the field offices to respond to public and news media inquiries. Others included the publication of materials including informational brochures and news releases. Another effort involved the strengthening of partnerships with other federal and state agencies.

A systematic effort to inform the public through the news media and water districts groups in the Lower Rio Grande Valley was established to keep inhabitants informed about hydrological conditions in the basin, including the water storage at the international dams. These data are updated each week in press releases and in the USIBWC's website. Other efforts involve sharing of information and visits to the project areas, especially the international wastewater treatment plants at San Diego, Nogales, and Nuevo Laredo.

The USIBWC published an information booklet and map inserts to facilitate information sharing with the public. In addition, the USIBWC constructed and periodically updates a website with information about the IBWC and its projects and other activities.

External Partnerships—The USIBWC has strengthened its cooperative arrangements with other agencies, including those for safety of dams inspections, and flood control response coordination with the U.S. Army Corps of Engineers. Similarly the USIBWC has furthered coordinated on water quality monitoring activities with the U.S. Geological Survey, the U.S. EPA, and the States of California, Arizona, New Mexico and Texas.

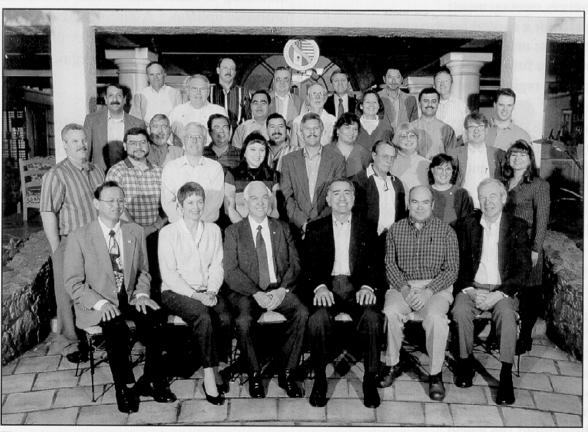


Figure 2

## Administration

The Administration Department is organized into five service offices and divisions: 1) Budget, 2) Acquisition, 3) Financial, 4) General Services, and 5) Information Management.

#### **Budget Formulation Appropriation**

Budgets for FY 1999 and 2000 were formulated and submitted to the Office of Management and Budget (OMB) through the Finance, Management and

Planning (FMP) office of the Department of State. Submittals for FY 1999 and 2000 were programbased and coordinated for the three functional areas and the Foreign Affairs Office. Formulation depended heavily on submittals based on the needs of the various cost centers. Appropriations in FY1998 and FY1999 in-

Administration Dept
R. Ortega/Vacant

Budget Office
G. Wade

Acquisition Division
P. Ahrens

Financial Services Division
R. Livengood

Information Services Division
J. Nuñez

Figure 3
Administration Department

1998 and of \$22,229,000 for S&E (235 employees) and \$28,255,000 for Construction (42 employees) in FY 1999 as shown in Figure 4.

The increases through FY 1999 in large part reflect the need to cover the federal government share

of the operations and maintenance costs of the South Bay International Wastewater Treatment Plant near the border in San Diego, California. The increases also cover the costs for equipment replacement and environmental protection compliance mandates.

## Cost Center Management

creased over prior years to include new programs.

The USIBWC budget is a line item under International Organizations in the Department of State budget. The Congress provides USIBWC appropriations for Salaries and Expenses (S&E) and for Construction, and authorizes use of other funds through transfers from other agencies and reimbursements from Mexico.

The USIBWC was funded in the amounts of \$20,457,000 for S&E (235 employees) and \$35,308,000 for Construction (42 employees) in FY

The USIBWC has

successfully implemented Cost Center Management (CCM) since in October 1995. CCM empowers managers to know the costs required to execute their responsibilities by drawing for expenditures as close as possible to the targeted level that they help develop as part of the agency budget. The CCM effort was completed with the final revision of the agency's accounting system in 1998.

### **Financial Management and Reporting**

The accounting software system is fully in place. The new software is budget driven and provides the reports required by the federal accounting system. The system provides:

- ·Complete tracking of obligated funds
- •Reduced payments processing efforts
- ·Improved tracking of expenditures
- •Improved budget execution reports
- ·Automatic U.S. Treasury report output.

In addition, the USIBWC contracted the National Finance Center in FY 1998 to provide Y2K compliance and to implement automated personnel action system.

#### **GAO** Audit

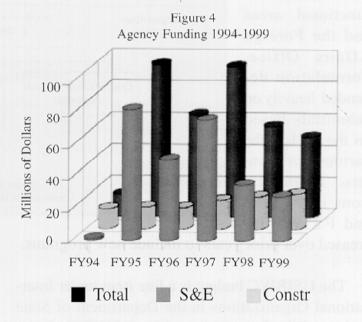
The General Accounting Office (GAO) performed a review of the USIBWC's activities for Fiscal Years 1994-98, results of which were published in September 1998. While some administrative weaknesses were identified, these were corrected. The GAO recognized the importance of the IBWC's involvement in border issues that is a major part of the United States-Mexico relationship. The GAO recommended annual independent financial statement audits as a way of providing a greater oversight over the USIBWC's operations.

# Computer and Communications Upgrading

The USIBWC completed installation of a PC based accounting system (GLOWS). The agency improved its e-mail capabilities and its Local Areas Network (LAN). A Y2K compatible computer replacement program was completed.

## **Headquarters Building**

The agency continues to seek location and funding for a permanent office building.



## **Operations**

This Department oversees water accounting and operations and maintenance activities in the USIBWC's ten field offices, along with a newly established office which oversees compliance with occupational health and safety standards.

#### Water Accounting Hydrographic Operations

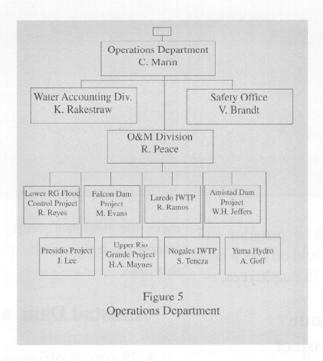
The Water Accounting Division, with counterparts from the MxIBWC, implements treaty provisions regarding measurement, computation and delivery of the international waters. In addition, the

Division oversees the gaging and hydrographic functions the USIBWC, using the results to join with Mexico in determining the national ownership of the waters in the Rio Grande and at international Amistad and Falcon Reservoirs. Similarly, the information obtained is used to aid in flood operations and opera-tions during periods of drought.

The Division is porting its computer applications (which include processing for the water bulletin, water accounting, and historical data base) from the IBM Main-frame Computer to the Novell PC/Network.

#### Safety and Health Manager

The Safety and Health Program has been enhanced with the addition of a Safety and Health manager. A comprehensive review of each field office has been conducted identifying deficiencies in procedures, equipment and personnel protective measures and training. The program emphasizes improvement and expansion of the USIBWC's Safety and Health Program.



Current activities include accounting for the extraordinary drought related water debt by Mexico under provisions of the 1944 Water Treaty related to inflows from tributaries in Mexico. Further, the Division is supporting development of studies in Texas and Mexico related to water management in periods of drought.

The Water Accounting Division maintains an extensive database of historical stream flow, reservoir storage and climatological data and produces two bulletins documenting the data annually.

The fundamental benefits are to:

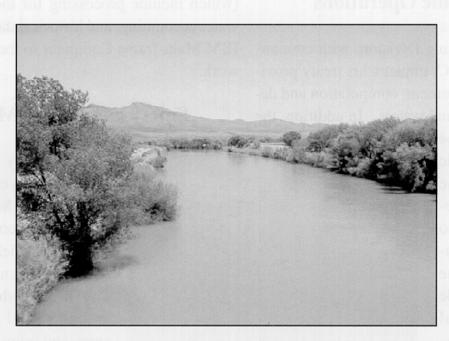
- Ensure a safe working environment for all employees;
- Protect visitors and the public from harm;
- ·Minimize loss of property; and,
- •Minimize agency mission interruptions.

A plan is in place which establishes compliance expectations and requirements. The plan fosters a management-employee team approach to identify, evaluate and control hazards before activities begin and seeks continuous improvement.

#### **Operations and Maintenance**

The USIBWC field operations are in furtherance of the part of international joint project activities with Mexico covering the project offices described below.

A five person headquarters based Operations and Maintenance Division manages and supervises field project operations. This office provides support for flood operations, boundary delineation and crossing projects, natural and cultural resource protec-



tion and compliance, license and lease program and realty operations to the following field offices which have a combined work force of 178 employees.

## Lower Rio Grande Flood Control Project

A 48 person field office oversees a system of diversion dams and some 400 miles river and off-river flood ways to protect some 1.5 million inhabitants and some 1.2 million acres of irrigated lands on both sides of the boundary in the delta of the Rio Grande.

#### **Falcon Dam and Power Plant**

A 30 person field office that oversees an international dam and reservoir project located above the delta of the Rio Grande that provides flood control, maximizes use of waters assigned to each country for municipal, industrial and irrigation uses, power generation, and recreation.

## Nuevo Laredo Sanitation Project

A two person field office in Laredo, Texas oversees the United States participation in the operations and maintenance of an international waste-water treatment plant in Nuevo Laredo, Tamaulipas. This plant has been designed to

meet the higher quality standards in the United States and preserve the quality of the Rio Grande in this area.

#### **Amistad Dam and Power Plant**

A 25 person office oversees this international dam and reservoir project located in the middle part of the 1,254 mile long international reach of the Rio Grande that provides flood control, maximizes use of waters assigned to each country for municipal, industrial and irrigation uses, power generation, and recreation.

#### **Presidio Project Office**

The Presidio Project Office was separated from the Upper Rio Grande Projects office in October 1998. A six employee office oversees a flood protection system consisting of a floodway confined by levees and the lower portion of the Boundary Preservation Project. The limits of this project extend along a 400 mile stretch of the Rio Grande from the Presidio, Hudspeth, Jeff Davis tri-county line to the Arroyo de Agua Verde.

### Upper Rio Grande Projects

A 39 employee field office oversees this system of stabilized river channel and floodway confined by flood protection levees of some 100 miles of the Rio Grande inland in El Paso, Texas and Southern New Mexico and the first 155 miles of the upper part of the international reach of the Rio Grande from El Paso - Juarez, Chihuahua to the tri-county line (Presidio-Hudspeth-Jeff Davis Counties).

#### **Nogales Sanitation**

An eight employee office oversees the operation and maintenance of an international wastewater treatment plant in the United States that serves Nogales, Arizona and Nogales, Sonora. A private contractor performed the operations and maintenance of the facility from October 1996 through September 1998. In September 1998, the USIBWC assumed the operations and maintenance through use of its own employees.

#### Yuma Hydro

A six employee office coordinates with the U.S. Bureau of Reclamation the delivery of Colorado River treaty waters assigned to Mexico, monitors the salinity of those waters to comply with international agreements, and provides early warning of activities in the U.S. that may impact on the waters delivered to Mexico.

## San Ysidro Projects

The San Ysidro, California Field Office, with a staff of four persons, ensures that the private contractor performing the operations and maintenance of the South Bay International Wastewater Treatment Plant (SBIWTP) complies with contract requirements. The SBIWTP is a 25 million gallon per day (mgd) advanced primary wastewater treatment plant which handles sewage from Tijuana, Baja California. The office oversees the construction of the interceptor-canyon collection systems and supports the City of San Diego in its supervision of the South Bay Ocean Outfall. This office, in coordination with the appropriate headquarters staff, reviews environment studies, conceptual, preliminary and detailed design for the secondary treatment phase, scheduled for construction in early 2000.

In addition, the office oversees flood control activities for the channelized Tijuana River that enters the United States from Mexico.

## **Engineering Department**

The Engineering Department oversees project design, and environment management activities, along with project planning through a newly opened office.

#### Design

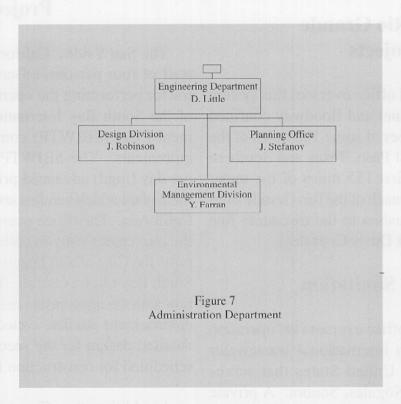
The Design Division undertook design and hydraulic reviews for a number of border projects

that impact on United States-Mexico treaty obligations. Among activities, were review of final drawings for new bridges under cons-truction over the Rio Grande at Laredo. Texas-Nuevo Laredo, Tamaulipas, Brownsville, Texas-Matamoros. Tamaulipas, and Eagle Pass. Texas-Piedras Negras, Coahuila. The Division also viewed proposals for new bridges and border crossings; coordinated with the JTF-6 in its border fence and road improvements; de-

signed vortex environmental structures for the Canalization Flood Control Project; participated in the coordination of salinity and sediment study efforts along the Lower Colorado River; and coordinated the remapping of the Tijuana River adjacent to the SBIWTP for the FEMA Flood Insurance Program.

Data exchange and modeling efforts were begun for the transboundary groundwater basins at El Paso - Juarez, Middle Rio Grande, and the Santa Cruz River. Support was provided to Texas and Mexico in their Lower Rio Grande Valley drought studies.

Design was continued for portions of the Rio Grande American Canal Extension Project at El Paso.



Technical support was provided regarding the United States -Mexico consultations over the proposed lining of the All-American Canal in Imperial County, California.

Coordination support was advanced for potential new partnerships for United States-Mexico studies for restoration of the Salton Sea and the Colorado River Delta, along with San Dicgo-Tijuana long term Colorado River water conveyance options. In addition, the Design Divi-

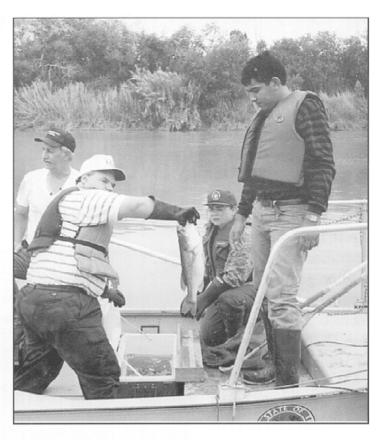
sion, along with the Water Accounting Division, supported USIBWC efforts with Texas and Mexico concerning noxious weed infestation in the Lower Rio Grande Valley and initiated planning for joint mapping of the United States-Mexico border; replacement of RGACE Riverside Dam, canal lining between American Dam and International Dam and electrical rehabilitation of American Dam facilities, and hydraulic studies of the Lower Rio Grande.

#### **Environmental Management**

The Environmental Management Division (EMD) assumed the lead role for the USIBWC in a cooperative arrangement with the State of Texas to manage the Texas Clean Rivers Program (monitoring and quality assessment) in the international reach of the Rio Grande Basin. EMD became the lead agency for the Interagency Task Force on Water Quality Monitoring along the United States-Mexico border. EMD lead cooperative binational surface water quality programs along with groundwater quality monitoring in the Nogales Wash. In addition, EMD joined in cooperative efforts with U.S. water quality agencies concerning standardization of monitoring and in developing binational water quality indicators. It reviews environmental studies submitted by other agencies and is leading USIBWC environmental impact studies for proposed river preservation and conveyance improvement studies in the Lower Rio Grande Valley, the Upper Rio Grande and the international reach of the Colorado River. It coordinates with and provides technical support to other offices for compliance with applicable water quality for the international wastewater treatment plants. EMD leads the USIBWC efforts in negotiating a new National Pollutant Discharge Elimination Permit (NPDES) for the Nogales International Wastewater Treatment Plant.

EMD secured funding and initiated the development of Spill Prevention Control and Countermeasures (SPCC) Plans at Falcon and Amistad Dams Field Offices.

EMD leads USIBWC efforts as the lead agency for the El Paso-Las Cruces Regional Sustainable Water Project to convey drinking water to the El Paso area from Elephant Butte Dam.



## Planning

The newly created technical Planning Office is supporting the technical aspects in budget formulation for future years and developing program planning procedures and guidelines. As part of the USIBWC outreach effort, the Planning Office identifies opportunities for collaborative work and coordinates with local, state and federal agencies, and the general public to exchange and develop information/data required for planning. This office is supporting the USIBWC's efforts in cooperation with Texas and the three Rio Grande area planning regions under Texas' recently enacted regional water planning program, Senate Bill 1. In addition this office, along with the field project offices and the Foreign Affairs Office is supporting binational community development effort coordination under a new vision of excellence for the United States-Mexico border supported by the United States Secretary of State and the Mexican Secretary of Foreign Relations in their report to the United States and Mexican Presidents in June 1998.

## **Special Projects**

The Special Projects Department oversees the facilities planning program for seven Mexican border cities along with construction programs in furtherance of those plans and other USIBWC construction activities.

#### **South Bay IWTP**

Construction of this facility was completed in

April 1987 with initial operations of up to 13 million gallons per day (mgd). The plant is located at the border in San Diego. Operation at its capacity of 25 mgd is expected in early 1999, when the South Bay Ocean Outfall, constructed by the City of San Diego, is placed into operation.

The SIWTP (1994-97) was constructed to provide advanced primary treatment. The project also involves

interception-canyon collectors to collect dry weather sewage from Tijuana. Environmental studies to determine the best manner of achieving secondary treatment are expected to be completed in 1999.

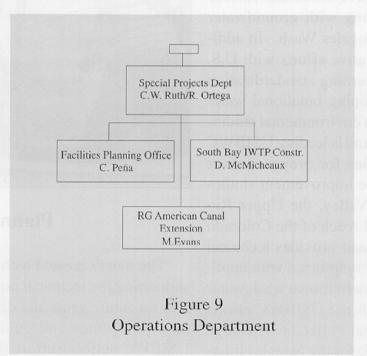
The plant has been operated and maintained by a private contractor since 1997. The contractor will also be responsible for maintaining the land outfall and the various canyon collectors.

## Rio Grande American Canal Extension

This project involves the construction of approximately 12 miles of lined canal and three miles of reconstruction of an existing canal along the Rio

Grande at El Paso, Texas. The canal extends a lined canal constructed in the late 1930s to provide a physical means of distributing water to Mexico un-

der the 1906 Convention in the bed of the river and conveying United States waters in a canal system, totally in the United States. Construction began in 1994 and is scheduled for completion in 1999. Additional work such as bridges, along with related work and the rehabilitation of the 1930's structures including the reconstructed portion of the canal is under design.



## **Facility Planning**

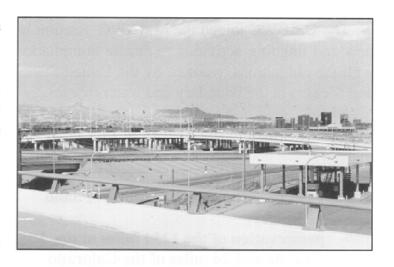
The USIBWC joined with MxIBWC in leading a facility planning effort in seven Mexican border communities to bring their wastewater system planning effort to levels of certification by the BECC and financing through the NADBank. The planning efforts led to the certification by the BECC of the wastewater system projects for Mexicali, Baja California and Reynosa, Tamaulipas. Efforts for Cd. Acuña and Piedras Negras, Coahuila and Nogales, Sonora are nearing completion towards potential BECC certification in 1999. Two additional programs were added for Matamoros and Nuevo Laredo, Tamaulipas.

In addition, immediate need works construction projects were carried out for Mexicali and Nogales.

The USIBWC is joining MxIBWC in the construction of a \$15.8 million treatment plant, pumping station and force main component of the Mexicali facility plan certified by the BECC.

#### Cordova Bridge of The Americas

Construction of the Cordova Bridge of the Americas between El Paso, Texas and Juárez, Chihuahua, began in June 1996 and was completed in June 1998. Construction was successfully sequenced in such a way to avoid disrupting international traffic between the United States and Mexico. The old bridge that was originally built in 1967 was replaced because of its severely weakened condition.



The replacement structure includes two northbound truck lanes, four northbound automobile lanes, four southbound automobile lanes, two southbound truck lanes, and two pedestrian walkways.

## **Foreign Affairs**

The present day IBWC, is a more than century-old experience by the governments of the United States and Mexico to resolve, through a joint international commission located at the border, those differences that arise from their common boundary.

The IBWC is an international organization that in all respects has its roots in the 1848 Treaty of Guadalupe Hidalgo which established a temporary joint boundary commission to survey, mark and map the new boundary between the two countries. It was established by the two governments in 1889 as the International Boundary Commission.

The Water Treaty of February 3, 1944 expanded the jurisdiction and responsibilities of the International Boundary Commission and changed its name to the International Boundary and Water Commission (IBWC). The Commission's jurisdiction extends along the United States-Mexico boundary and inland into both countries where the two countries

have constructed international projects. The Commission is charged with application of the boundary and water treaties and settling differences that may arise in their application.

The specific IBWC decisions that memorialize an agreement of the Governments of the United States and Mexico for a joint project are in the form of IBWC Minutes. IBWC Minutes are recommendations to the two Governments which, when approved, form the binding obligation of the two Governments, entrusting each IBWC Commissioner to ensure the implementation of the terms of the agreement in his respective country.

#### **IBWC** Activities

The USIBWC joined the MxIBWC Section in new and ongoing activities to ensure compliance with the obligations assumed by the United States and Mexico in the boundary and water treaties.

Activities under these treaties in 1997 and 1998 include seven major areas:

- demarcation of the 744 miles of land boundary;
- preservation of the 1254 miles of the Rio Grande and 24 miles of the Colorado River as the international boundary;
- operation and maintenance of international flood control projects;
- operation and maintenance of international storage dams;
- determination and accounting for the national ownership of the waters of the boundary rivers;
- development of solution to water quality problems including construction operation and maintenance of wastewater treatment facilities for solution of border sanitation problems; and
- investigations and studies including water monitoring and data exchange activities.

### **International Agreements**

The IBWC concluded, and the two Governments approved, the following IBWC Minutes:

Minute No. 296, signed April 16, 1997– Establishes the amount that Mexico will pay annually as its contribution to the construction of the South Bay International Wastewater Treatment Plant beginning in 1997. Establishes the amount that Mexico will pay quarterly as its contribution to the operations and maintenance of the international plant beginning in 1997. Establishes procedures and guidelines for information exchange, quality monitoring and discussions for handling of future flows.

Minute No. 297, signed May 31, 1997— Establishes an operations and maintenance program, with standards, monitoring and supervision for the jointly-funded Nuevo Laredo Wastewater Treatment Plant in Mexico. Establishes a 10 year cost sharing arrangement for operations and maintenance that seeks to build the capacity of the local operating agency to sustain the project through a front loading of United States funds and international super-vision.

Minute No. 298, signed December 2, 1997—Supports the parallel pumping and conveyance works and treatment plant rehabilitation in Tijuana, BC developed through the BECC. Provides for and establishes procedures for use of United States funds for use in Mexico to cover the cost of an international connection. Allows the IBWC to provide international supervision in support of the NADBank. Provides safeguards against transboundary pollution through IBWC standards, monitoring and supervision.

Minute No. 299, signed December 3, 1998–Establishes terms under which the IBWC or any of its two Sections may provide reimbursable reciprocal support to the BECC.

#### Joint Engineering Reports

Joint Engineering reports were adopted for the facilities planning programs for Matamoros, Reynosa, and Nuevo Laredo, Tamaulipas and Ciudad Acuña and Piedras Negras, Coahuila. Other reports covered bases for costs incurred by one country for work performed by the other country on a number of joint projects. Still others cover the results of a second survey covering the presence of toxicity in the surface waters of the Rio Grande, characterization of the quality of the ground waters of the Nogales Wash. A joint study on the characterization of the Hueco groundwater basin at El Paso-Juárez was released.